

**REMARKS**

Claims 1–14, 16, and 19–22 are pending in this application. By this Amendment, claims 1, 16, and 20 are amended and claims 15, 17, and 18 are canceled. Support for the amendments to the claims may be found, for example, in the original claims, specification, and drawings. No new matter is added.

In view of the foregoing amendments and following remarks, reconsideration and allowance are respectfully requested.

**I. Objection to the Drawings**

The Office Action objects to the drawings as failing to comply with 37 CFR §1.83(a). Specifically, the drawings are objected to for allegedly not showing a diffraction grating recited in the claims. Applicants respectfully traverse the objection.

Paragraph [0081] of the specification states that "a diffraction grating may replace the lens 11 on the transparent substrate 10." Thus, the diffraction grating is adequately shown in that it is described as a substitute for a depicted element. Accordingly, reconsideration and withdrawal of the objection are respectfully requested.

**II. Claim Objection**

The Office Action objects to claim 19 under 37 CFR §1.75(c) as being of improper dependent form. Applicants respectfully traverse the objection.

Any terminology in the preamble that limits the structure of the claimed invention must be treated as a claim limitation. *See* MPEP §2111.02. Clearly, "electronic equipment," as recited in the preamble of claim 19, limits the structure of the claimed invention and must be treated as a claim limitation. Accordingly, reconsideration and withdrawal of the objection are respectfully requested.

**III. Rejections Under 35 U.S.C. §103**

**A. Kaneko in view of Kish**

The Office Action rejects claims 1, 2, 4, 9, 10, 15–20, and 22 under 35 U.S.C. §103(a) over U.S. Patent No. 6,999,493 to Kaneko et al. ("Kaneko") in view of U.S. Patent No. 5,724,376 to Kish et al. ("Kish"). By this Amendment, claims 15, 17, and 18 are canceled, rendering their rejection moot. As to the remaining claims, Applicants respectfully traverse the rejection.

**1. Claim 1**

Without conceding the propriety of the rejection, independent claim 1 is amended to more clearly recite various novel features of the claimed invention. Specifically, claim 1 is amended to clarify that "the surface-emitting laser [is] composed of a different material than the transparent substrate, the surface-emitting layer adhered to the transparent substrate by an adhesive." Kaneko does not describe such features.

Furthermore, Kaneko does not teach or suggest "an integrated circuit chip that is flip-chip mounted on the transparent substrate and arranged to cover the surface-emitting laser; the integrated circuit chip including a light receiving device that is arranged so as to face the surface-emitting laser." Instead, Kaneko discusses that the solder bumps are formed on the n-type metal electrode 3B of the surface emission laser 100 and mounted on the drive substrate 11 by flip chip mounting. The photo diode 7 is formed on the drive substrate 11. *See* column 7, lines 48–56, and Figure 1. Thus, the photo diode is not formed on the flip chip, as required by claim 1, but instead is formed on the main substrate.

Kish fails to remedy any of these deficiencies. Regardless of its asserted disclosures, Kish does not teach or suggest the features described above.

Claim 1 would not have been rendered obvious by Kaneko and Kish. Claims 2, 4, 9, 10, 16, and 19 variously depend from claim 1 and, thus, also would not have been rendered obvious by Kaneko and Kish. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

**2. Claim 20**

Without conceding the propriety of the rejection, independent claim 20 is amended to more clearly recite various novel steps of the claimed method. Kaneko and Kish, either separately or combined, do not teach or suggest the method of claim 20. Therefore, claim 20 would not have been rendered obvious by Kaneko and Kish. Claim 22 depends from claim 20 and, thus, also would not have been rendered obvious by Kaneko and Kish. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

**B. Kaneko in view of Swirhun**

The Office Action rejects claim 3 under 35 U.S.C. §103(a) over Kaneko in view of U.S. Patent No. 6,835,992 to Swirhun et al. ("Swirhun"). Applicants respectfully traverse the rejection.

As discussed above, Kaneko does not teach or suggest each and every feature of claim 1. Swirhun fails to remedy the deficiencies of Kaneko's disclosure. Therefore, Kaneko and Swirhun, either separately or combined, fail to teach or suggest all of the features of claim 1.

Claim 1 would not have been rendered obvious by Kaneko and Swirhun. Claim 3 depends from claim 1 and, thus, also would not have been rendered obvious by Kaneko and Swirhun. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

**C. Kaneko in view of Lebby**

The Office Action rejects claims 5–8 and 21 under 35 U.S.C. §103(a) over Kaneko in view of U.S. Patent No. 5,838,703 to Lebby et al. ("Lebby"). Applicants respectfully traverse the rejection.

As discussed above, Kaneko does not teach or suggest each and every feature of claims 1 and 20. Lebby fails to remedy the deficiencies of Kaneko's disclosure. Therefore, Kaneko and Lebby, either separately or combined, fail to teach or suggest all of the features of claims 1 and 20.

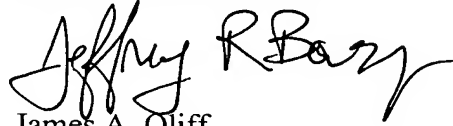
Claims 1 and 20 would not have been rendered obvious by Kaneko and Lebby. Claims 6–8 and 21 variously depend from claims 1 and 20 and, thus, also would not have been rendered obvious by Kaneko and Lebby. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

**IV. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1–14, 16, and 19–22 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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